Energy Tidbits – July 2007

Ann Arbor and 12 other cities will share $2.5 million from DOE as part of the 2007 Solar America Cities initiative. The cities were competitively selected for two-year projects that are designed to integrate solar technologies into city energy planning, zoning, and facilities, and to streamline city regulations that impact solar adoption by residents and businesses. Other Solar Cities are Madison, Austin, Boston, New Orleans, Pittsburgh, Portland, Salt Lake City, Berkeley, San Diego, San Francisco, Tucson, and New York.

Michigan Renewable Energy Exchange (MI-REX) is a new pilot project operated by the Energy Office to provide a means for owners of small solar and wind electric systems to sell Renewable Energy Certificates (RECs). The Energy Office will certify RECs and use the Energy Office web site to notify potential buyers that the RECs are available for purchase. The Energy Office will not be involved in the actual purchase transaction. The Energy Office will provide this service at no charge, but only for solar or wind energy systems 1-100 kW in size located in Michigan. Systems under 1 kW or over 100 kW are not eligible. The first MI-REX's will be for calendar year 2007. At this time, the Energy Office is accepting applications to participate in MI-REX. 2007 MI-REX Certification Applications and MI-REX Certificates for purchase will not be available until early 2008. www.michigan.gov/eorenew

Rich VanderVeen was recognized by DOE this year at the Wind Powering America state summit as the 07 Midwest Wind Energy Advocate for his dedication, enthusiasm and tireless efforts in addressing barriers to wind development in the Midwest. The award was presented by DOE's Phil Dougherty and NREL's Larry Flowers.

Kellogg Hotel and Conference Center, located on the campus of Michigan State University in East Lansing, has earned Green Lodging Michigan certification as a Partner. The Kellogg Center has implemented a variety of green initiatives including occupancy sensors to control lighting, Energy Star light bulbs, and a towel/linen reuse program. "We are very pleased to receive partner certification in the Green Lodging program," said Rick Gierman, Engineering Supervisor at the Kellogg Hotel and Conference Center. "We are committed to efforts to keep a sustainable environment, as is the entire University. And we are devoted to supporting the University's mission to be a leader in environmental initiatives." www.hfs.msu.edu/kellogg/

Peter Lark, MPSC Chair, is stepping down to take the head job at the Lansing Board of Water and Light. He was one of four finalists for the position, and one of 124 candidates.

John Deere Wind Energy, the principal owner and developer of Harvest Wind Farm LLC, has begun construction of more than 30 wind turbines in Huron

County. Harvest Wind Farm will be located in Oliver and Chandler Townships near Elkton and Pigeon. The project will consist of 32 Vestas V82 wind turbines, each capable of producing 1.65 MW. The total project capacity will be 52.8 MW, which is enough to produce electricity for more than 15,000 homes. Commercial operation is scheduled for early 2008. Wolverine Power Cooperative has signed an agreement with Harvest Wind Farm to purchase energy under a 20-year power purchase agreement. Wolverine plans to sell energy from the wind farm to its six member companies and their retail customers. In addition, Wolverine plans to explore a wind farm near Rogers City.

Paris & Free Bikes! By mid-July, 10,648 bicycles will show up in 750 stations across Paris, allowing riders to pick them up and drop them off at a different destination. By 2008, the city hopes to provide nearly twice that many. A pre-paid card or credit card will unlock a bicycle from a station; a 30-minute ride is free, and every additional half-hour costs one euro, or about $1.33.

Demand Response pilot program has been initiated by the MPSC. Demand response programs are customer-driven efforts that reduce electric consumption in response to price signals, incentives, or information from electric grid operators. The programs are intended to reduce electric demand during periods of high wholesale prices, providing an alternative to building new generation capacity. Although utilities in Michigan currently provide demand response programs, customer participation is low, and new technology is available. In its order, the Commission directed a collaborative process to include pilot programs that emphasize the use of "smart" metering, advanced technology, and time-based or real time rate structures. Case No. U-15277

Variable Frequency Drives is covered in the June issue of the Energy Observer. Look under Publications at www.michigan.gov/energyoffice.

Energy Conversion Devices has announced the installation of its UNI-SOLAR ground-mounted amorphous thin-film photovoltaic (PV) panels to power the 1.1 Megawatt solar energy system at Paramount Farms, the world's largest supplier of pistachios and almonds. The installation, which spans 8 acres, is one of the largest single-site, privately-owned solar energy systems in the U.S. http://sev.prnewswire.com/oil-energy/20070607/CLTH05607062007-1.html

City of Chicago has opened a subsidized housing development that uses wind turbines, solar thermal panels, rainwater collection and gray-water recycling. The five-story ‘Near North Apartments’ is a 96-unit, 46,000 ft2 building that meets LEED certification standards, and features eight turbines lined in a row down the length of the building’s curved roof which is designed to accelerate wind speeds. The 8 cylindrical wind turbines are each about 5 feet high and 10 feet long. The green design elements added $1 million to total construction costs of $14 million, with the expected payback period at 17 years.
http://www.plentymag.com/features/2007/03/green_power_for_the_people.php
http://www.lakefront.org/nearnorth.html

Two 5 MW offshore wind turbines have been erected by REpower Systems AG at the DEWI-OCC (Offshore and Certification Centre) in Cuxhaven, Germany. Both turbines have a hub height of 117 meters and a rotor diameter of 126 meters. REpower set up a 5 MW turbine in the Scottish North Sea in August 2006.

Pierce Cedar Creek Institute has created a Solar Energy for the Classroom curriculum to help 6th through 8th grade science instructors teach students about solar energy. The curriculum includes 15 activities and demonstrations that provide an introduction to solar energy, variables affecting solar energy potential, solar energy storage, practical uses of photovoltaic (PV) systems, and energy cost and conservation. This curriculum has been correlated to Michigan's Science standards and benchmarks. http://www.cedarcreekinstitute.org/curriculum-pcci.htm

Michigan Biomass Energy Program (MBEP) is now seeking proposals from non-profit and public organizations for state projects that expand markets for energy and fuel derived from Michigan biomass resources. MBEP plans to award multiple grants of up to $24,950 per project. Proposals are due to the Energy Office by 5:00 PM on Tuesday, August 21, 2007. See www.michigan.gov/biomass for more information. To obtain the Request for Proposal contact tonsors@michigan.gov or at 517-241-6223.

LEED-EB project grants from the Energy Office will fund three to seven projects to encourage public and non-profit building owners to maximize the operational efficiency of their buildings by certifying or re-certifying one of their buildings under the LEED-EB program and at the same time improving its energy efficiency performance. The grants are for a maximum of $15,000. Contact Tim Shireman at (517) 241-6281 or e-mail: shiremant@michigan.gov to obtain a copy of the Request For Proposal. Proposals are due by 5:00 p.m. on July 31, 2007.

Michigan Renewable Fuels Commission report suggests that $50 million from the 21st Century Jobs Fund and another $150 million from DOE grants; oil, gas and forestry royalties or a special earmark be used to provide no-interest loans, incentives and grants to companies looking to use Michigan-based raw materials, goods and services in renewable fuel ventures. The report suggests that $50 million be used for five pilot or commercial-scale renewable fuels plants, be it a corn ethanol plant or a refinery that turns grass clippings, wood chips and other plant stems into energy. The Commission’s 76-page report has 14 recommendations including creating a low-carbon emission transportation fuels program in which 25% energy use in Michigan is from renewable fuels by 2025 and establishing Regional Biomass Processing Centers to act as feedstock hubs for prospective biomass customers.

U.S. Senate has passed an energy bill containing the first significant fuel-economy increase in years. The bill requires cars and light trucks to get an average of 35 mpg by 2020, up from the current 22.2 mpg for light trucks and 27.5 mpg for cars. It also calls for limits on gasoline price-gouging; new appliance and lighting efficiency standards; funding for research into plug-in hybrids; and a sevenfold increase in ethanol production by 2022. A federal Renewable Portfolio Standard and $32 billion in renewable energy tax breaks did not make it into the final bill.

$50 Million grant to MSU for the Great Lakes Bioenergy Research Center is part of a 5-year, $375-million investment by the U.S. Department of Energy that will fund three research centers. Ken Keegstra, MSU professor of plant biology and biochemistry, will be the executive director of the center, splitting his time between East Lansing and Madison. U of Wisconsin and MSU will partner on the project. The focus will be on more dense grasses and plants, methods of converting them to ethanol, and producing it in a way that makes it economically feasible. Other biofuel research centers will be at Oak Ridge National Lab in Tennessee and the Lawrence Berkeley National Lab in Berkeley.

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